

# Green Sea Turtle (*Chelonia mydas*)

**FAMILY:** Cheloniidae

**STATUS:** Breeding colony populations in Florida and on the Pacific Coast of Mexico are listed as Endangered; all others are listed as Threatened (*Federal Register*, July 28, 1978).

**DESCRIPTION:** The green sea turtle grows to a maximum size of about 4 feet and a weight of 440 pounds. It has a heart-shaped shell, small head, and single-clawed flippers. Color is variable. Hatchlings generally have a black carapace, white plastron, and white margins on the shell and limbs. The adult carapace is smooth, keelless, and light to dark brown with dark mottling; the plastron is whitish to light yellow. Adult heads are light brown with yellow markings. Identifying characteristics include four pairs of costal scutes, none of which borders the nuchal scute, and only one pair of prefrontal scales between the eyes. Hatchling green turtles eat a variety of plants and animals, but adults feed almost exclusively on seagrasses and marine algae.

**HABITAT:** Green turtles are generally found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets. The turtles are attracted to lagoons and shoals with an abundance of marine grass and algae. Open beaches with a sloping platform and minimal disturbance are required for nesting. Green turtles have strong nesting site fidelity and often make long distance migrations between feeding grounds and nesting beaches. Hatchlings have been observed to seek refuge and food in *Sargassum* rafts.

**CRITICAL HABITAT:** 50 CFR 226.208 Culebra Island, Puerto Rico – Waters surrounding the island of Culebra from the mean high water line seaward to 3 nautical miles (5.6 km). These waters include Culebra's outlying Keys including Cayo Norte, Cayo Ballena, Cayos Geniquí, Isla Culebrita, Arrecife Culebrita, Cayo de Luis Peña, Las Hermanas, El Mono, Cayo Lobo, Cayo Lobito, Cayo Botijuela, Alcarraza, Los Gemelos, and Piedra Steven.

**REPRODUCTION AND DEVELOPMENT:** The nesting season varies with the locality. In the southeastern U.S., it is roughly June through September. Nesting occurs nocturnally at 2, 3, or 4-year intervals. Only occasionally do females produce clutches in successive years. A female may lay as many as nine clutches within a nesting season (overall average is about 3.3 nests per season) at about 13-day intervals. Clutch size varies from 75 to 200 eggs, with an average clutch size of 136 eggs reported for Florida. Incubation ranges from about 45 to 75 days, depending on incubation temperatures. Hatchlings generally emerge at night. Age at sexual maturity is believed to be 20 to 50 years.

**RANGE AND POPULATION LEVEL:** The green turtle has a worldwide distribution in tropical and subtropical waters. Major green turtle nesting colonies in the Atlantic occur on Ascension Island, Aves Island, Costa Rica, and Surinam. Within the U.S., green turtles nest in small numbers in the U.S. Virgin Islands, Puerto Rico, Georgia, South Carolina, and North Carolina, and in larger numbers in Florida and Hawaii. The Florida green turtle nesting aggregation is recognized as a regionally significant colony. Nest numbers in Florida have ranged from 435 laid in 1993 to 13,225 in 2010, which likely represents over 5,000 females nesting in 2010. In the U.S. Pacific, over 90 percent of nesting throughout the Hawaiian archipelago occurs at French Frigate Shoals, where an average of 390 females nested annually from 2000-2009. Elsewhere in the U.S. Pacific, nesting takes place at scattered locations in the Commonwealth of the Northern Marianas, Guam, and American Samoa. In the western Pacific, the largest green turtle nesting aggregation in the world occurs on Raine Island, Australia, where thousands of females nest nightly in an average nesting season. In the Indian Ocean, major nesting beaches occur in Oman where approximately 44,000 nests, likely representing over 10,000 females, were recorded in 2005.

**REASONS FOR CURRENT STATUS:** A major factor contributing to the green turtle's decline worldwide is commercial harvest for eggs and meat. Fibropapillomatosis, a disease of sea turtles characterized by the development of multiple tumors on the skin and internal organs, is also a mortality factor and has seriously affected green turtle populations in Florida, Hawaii, and other parts of the world. The tumors interfere with swimming, eating, breathing, vision, and reproduction, and turtles with heavy tumor burdens may become severely debilitated and die. Other threats include loss or degradation of nesting habitat from coastal development and beach armoring; disorientation of hatchlings by beachfront lighting; nest predation by native and non-native predators; degradation of foraging habitat; marine pollution and debris; watercraft strikes; and incidental take from channel dredging and commercial fishing operations.

**MANAGEMENT AND PROTECTION:** In the southeastern U.S., major nest protection efforts and beach habitat protection are underway for most of the significant nesting areas, and significant progress has been made in reducing mortality from commercial fisheries in U.S. waters with the enforcement of turtle excluder device regulations. Many coastal counties and communities in Florida have developed lighting ordinances to reduce hatchling disorientations. Important U.S. nesting beaches have been and continue to be acquired for long-term protection. The U.S. Fish and Wildlife Service and National Marine Fisheries Service have funded research on the fibropapilloma disease to expand our knowledge of the disease with the goal of developing an approach for remedying the problem. Due to the long range migratory movements of sea turtles between nesting beaches and foraging areas, long-term international cooperation is absolutely essential for recovery and stability of nesting populations.

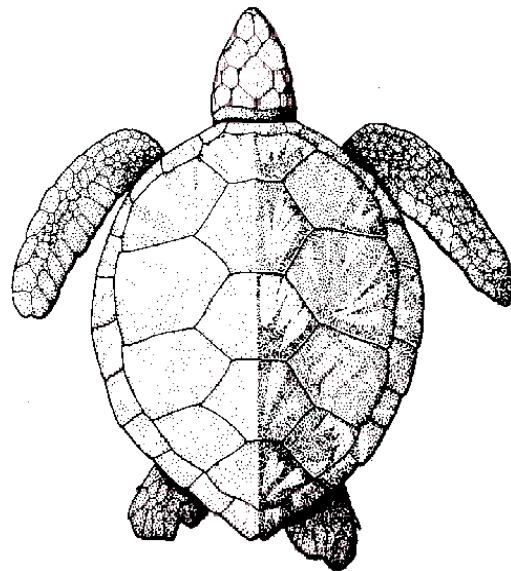
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